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# FULL THROTTLE 3-STEP FUEL SYSTEM CLEANER

- Contains no alcohols or other harmful solvents, eliminating concerns about technicians' health and sensitive automotive components.
- For professional use only

### **Description**

The Full Throttle complete 3 step fuel system cleaning kit will help correct rough idling, misfiring, power loss, pinging, knocking and engine run-on. It helps improve gas mileage and reduce emissions. Full Throttle cleans safely, quickly, and effectively.



### **Applications**

Can be used on all gasoline fueled combustion engines, including engines with Multec and "pintle-less" injectors. It is oxygen sensor safe and can be used on "coated" intake components. Do not apply Intake Cleaner to rotary engines.

### **Features & Benefits**

Feature	Benefit
Step 1—Fuel System Cleaner	A premium, high tech formula specifically designed to clean the complete fuel system from the gas tank to the exhaust. This concentrated formula dissolves varnish, carbon and gum deposits. Highly effective detergents clean the fuel injectors, throttle body, carburetor, intake valves and combustion chambers. Scavenges water from the fuel system. Lubricates upper cylinders, valves and rings, while improving combustion and reducing exhaust emissions.
Step 2—Oil System Booster	A unique blend of additives formulated to remove crankcase gum, varnish and deposit build-up. Contains friction modifiers and extreme pressure components to protect engine friction surfaces while cleaning. This oil based product is designed to remain in the crankcase for a full oil change interval, providing more complete crankcase cleaning.
Step 3—Intake Cleaner	A two-stage intake carbon cleaner. Quickly dissolves carbon and varnish from the intake manifold, valves, pistons and combustion chamber. Residual cleaner continues to soften "rock-like" carbon valve deposits for a more thorough, long lasting cleaning. Helps reduce build-up in the catalytic converter and reduces exhaust emissions. This formula is safe for the vehicle, environment and technicians.
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Package 3-Step Kits, 8 per case

Part Number FTPK 10

# Full Throttle 3-Step Fuel System Cleaner and Induction Service

### **Directions:**

**Notes** • Bring engine to normal operating temperature before application.

- The vehicle should have a minimum of 1/8 tank of fuel.
- Apply complete contents of each bottle.
- Apply to vehicle in a well ventilated area.
- Do not apply Intake Cleaner to rotary engines.

### 1. Fuel System Cleaner

Pour the Fuel System Cleaner (F bottle) into the fuel tank. Use a funnel, do not spill onto the painted surface.



Pour the Oil System Booster (C bottle) into the crankcase, using the proper filler location. Leave in the crankcase, drain with the next oil change. (Oil based for long-term, thorough cleaning.)

### 3. Intake Cleaner

- A. Turn the applicator flow control valve to the closed (full off) position.
- B. Pour the contents of the Intake Cleaner (V bottle) into the Intake Cleaner applicator. Hang the applicator from the hood.
- C. Connect the adaptor to a direct manifold vacuum source closest to the throttle body, to maximize cleaning of the intake manifold and to distribute cleaning solution to all cylinders. Do not connect to an intake runner vacuum source, which will clean only one cylinder. Avoid switches, sensors and filters.
- D. Start the engine, and increase engine speed to 1200 to 1500 RPMs. (Do not rev or race the engine.) Check the vacuum tee for a strong vacuum. If the vacuum is weak, choose another source.
- E. Adjust the flow control valve so that the rate of flow through the sight glass is a fast drip, but not a stream. (Visible exhaust is the normal by-product of effective cleaning.)
- F. When the applicator is empty, turn the flow control valve to the closed position but do not stop the engine. Continue to run the engine at 1200 to 1500 RPMs for 3 minutes to purge the system of cleaner.
- G. Stop the engine, disconnect the tapered adaptor from the vacuum source, and reconnect the manifold vacuum line to its proper source. If possible, drive the vehicle for 3 miles (4 km) to completely purge the system of cleaner.

Note: For extremely tenacious deposits, "hot soak" as follows. When the applicator is 2/3 empty, close the flow control valve, stop the engine and "hot soak" for 15 minutes or more. Then restart the engine and finish the application.

**Congratulations!** You have successfully cleaned the complete fuel system, crankcase and intake system! Regular maintenance will provide optimum power and performance, and save expensive repair costs.



# Full Throttle 3-Step Fuel System Cleaner & INDUCTION SERVICE - WITH THROTTLE BODY CLEANER

- Contains no alcohol or methanol, eliminating technician health and safety concerns
- For professional use only

### **Description**

The Full Throttle complete 3 step fuel system cleaning kit helps eliminate rough idling, misfiring, power loss, pinging, knocking and engine run-on. Helps improve performance and fuel economy, and reduce emissions. Full Throttle 3-Step Fuel System Cleaner cleans quickly, safely and effectively.



## **Applications**

Can be used on all gasoline fueled piston engines, including engines with Multec and "pintle-less" injectors. It is oxygen sensor safe and can be used with "coated" intake components. Do not apply Intake Cleaner to rotary engines.

### Products..... Benefits

Step 1—Fuel System Cleaner ....... A premium, high tech formula designed to clean the complete fuel system from the gas tank to the exhaust. This concentrated formula dissolves gum, varnish and carbon deposits. Highly effective detergents clean the fuel injectors or carburetor, intake valves and combustion chambers. Scavenges water from the fuel system. Lubricates injectors, valves, upper cylinders and rings, while improving combustion and reducing exhaust emissions.

Step 2—Throttle Body Air Intake Cleaner ..... Cleans the throttle body and throttle plate. Specially formulated triple-action cleaner for fast, effective removal of varnish, carbon, dirt and other contaminants. Lubricates the throttle plate and all moving parts, and provides double protection with a corrosion inhibitor and lubricity agent in conjunction with lubricating oil to prevent scoring and deposit build-up on close tolerance components. Safe for sensitive materials and components. Ford intake manifold safe. Also safe for idle control valves and oxygen sensors.

Step 3—Induction Cleaner ...... A two-stage intake deposit cleaner. Quickly dissolves gum and varnish deposits from the intake manifold and runners, valves, pistons and combustion chambers. Residual cleaner continues to soften hard carbon deposits for more thorough, long lasting cleaning. Lubricates while cleaning. Helps reduce build-up in the catalytic converter and reduce exhaust emissions. This formula is safe for the vehicle, environment and technicians.

Package 3-Step Kits, 8 per case

Part Number FTPK 10T

# Full Throttle 3-Step Fuel System Cleaner & Induction Service - with Throttle Body Cleaner

### **Directions**

**Notes** • Bring engine to operating temperature before application.

- Apply complete contents of each bottle.
- Apply to vehicle in a well ventilated area.
- Do not apply Induction Cleaner to rotary engines.

### 1. Fuel System Cleaner

Pour the Fuel System Cleaner (F bottle) into the fuel tank. Use a funnel, do not spill onto the painted surface.

### 2. Throttle Body Intake Air Cleaner

- A. Attach plastic extension tube securely to can nozzle.
- B. Bring engine to normal operating temperature, and stop engine.
- C. Access throttle body and plate by removing intake boot and duct assembly.
- D. With engine off, hold throttle at full open position.
- E. Wet inside of throttle body and plate with cleaner, let soak for 30 seconds.
- F. Scrub deposits from surfaces with small nylon bottle brush or toothbrush.
- G. Wet again and wipe clean with shop rag.
- Repeat if necessary.
- I. Reattach intake boot and duct assembly, start engine to purge cleaner and check for air leaks.

### 3. Induction Cleaner

- A. Turn the applicator flow control valve to the closed (full off) position.
- B. Pour the contents of the Intake Cleaner (V bottle) into the Intake Cleaner applicator. Hang the applicator from the hood.
- C. Connect the adaptor to a direct manifold vacuum source closest to the throttle body, to maximize cleaning of the intake manifold and to distribute cleaning solution to all cylinders. Do not connect to an intake runner vacuum source, which will clean only one cylinder. Avoid switches, sensors and filters.
- D. Start the engine, and increase engine speed to 1200 to 1500 RPMs. (Do not rev or race the engine.) Check the vacuum tee for a strong vacuum. If the vacuum is weak, choose another source.
- E. Adjust the flow control valve so that the rate of flow through the sight glass is a fast drip, but not a stream. (Visible exhaust is the normal by-product of effective cleaning.)
- F. When the applicator is empty, turn the flow control valve to the closed position but do not stop the engine. Run the engine at 1800 to 2000 RPMs for 3 minutes to purge the system of cleaner.
- G. Stop the engine, disconnect the adaptor from the vacuum source, and reconnect the manifold vacuum line to its proper source. If possible, drive the vehicle for 3 miles (4 km) or run the engine at 1800 to 2000 RPMs for 3 additional minutes to completely purge the system of cleaner.

Note: For extremely tenacious deposits, "hot soak" as follows. When the applicator is 2/3 empty, close the flow control valve, stop the engine and "hot soak" for 15 minutes or more. Then restart the engine and finish the application.

**Congratulations!** You have successfully cleaned the complete fuel system, throttle body and intake system! Regular maintenance will provide optimum power and performance, and save expensive repair costs.



# FULL THROTTLE 2-STEP FUEL SYSTEM CLEANER & INDUCTION SERVICE

- Contains no alcohols or other harmful solvents, eliminating concerns about technicians' health and sensitive automotive components.
- For professional use only

### Description

The Full Throttle 2-step fuel system cleaning kit helps eliminate rough idling, misfiring, power loss, pinging, knocking and engine run-on. Helps improve performance and fuel economy, and reduce emissions. Full Throttle 2-Step Fuel System Cleaner & Induction Service cleans quickly, safely and effectively.



### **Applications**

Can be used on all gasoline fueled piston engines, including engines with Multec and "pintle-less" injectors. It is oxygen sensor safe and can be used with "coated" intake components. Do not apply Intake Cleaner to rotary engines.

### Products..... Benefits

Step 1—Fuel System Cleaner ....... A premium, high tech formula designed to clean the complete fuel system from the gas tank to the exhaust. This concentrated formula dissolves gum, varnish and carbon deposits. Highly effective detergents clean the fuel injectors or carburetor, intake valves and combustion chambers. Scavenges water from the fuel system. Lubricates injectors, valves, upper cylinders and rings, while improving combustion and reducing exhaust emissions.

Step 2—Induction Cleaner ...... A two-stage intake deposit cleaner. Quickly dissolves gum and varnish deposits from the intake manifold and runners, valves, pistons and combustion chambers. Residual cleaner continues to soften hard carbon deposits for more thorough, long lasting cleaning. Lubricates while cleaning. Helps reduce build-up in the catalytic converter and reduce exhaust emissions. This formula is safe for the vehicle, environment and technicians.

Package 2-Step Kits, 8 per case

Part Number FTPK B2

# Full Throttle 2-Step Fuel System Cleaner and Induction Service

### **Directions:**

**Notes** • Bring engine to normal operating temperature before application.

- The vehicle should have a minimum of 1/8 tank of fuel.
- Apply complete contents of each bottle.
- Apply to vehicle in a well ventilated area.
- Do not apply Intake Cleaner to rotary engines.



Pour the Fuel System Cleaner (F bottle) into the fuel tank. Use a funnel, do not spill onto the painted surface.

### 2. Intake Cleaner

- A. Turn the applicator flow control valve to the closed (full off) position.
- B. Pour the contents of the Intake Cleaner (V bottle) into the Intake Cleaner applicator. Hang the applicator from the hood.
- C. Connect the adaptor to a direct manifold vacuum source closest to the throttle body, to maximize cleaning of the intake manifold and to distribute cleaning solution to all cylinders. Do not connect to an intake runner vacuum source, which will clean only one cylinder. Avoid switches, sensors and filters.
- D. Start the engine, and increase engine speed to 1200 to 1500 RPMs. (Do not rev or race the engine.) Check the vacuum tee for a strong vacuum. If the vacuum is weak, choose another source.
- E. Adjust the flow control valve so that the rate of flow through the sight glass is a fast drip, but not a stream. (Visible exhaust is the normal by-product of effective cleaning.)
- F. When the applicator is empty, turn the flow control valve to the closed position but do not stop the engine. Continue to run the engine at 1200 to 1500 RPMs for 3 minutes to purge the system of cleaner.
- G. Stop the engine, disconnect the tapered adaptor from the vacuum source, and reconnect the manifold vacuum line to its proper source. If possible, drive the vehicle for 3 miles (4 km) to completely purge the system of cleaner.

Note: For extremely tenacious deposits, "hot soak" as follows. When the applicator is 2/3 empty, close the flow control valve, stop the engine and "hot soak" for 15 minutes or more. Then restart the engine and finish the application.

**Congratulations!** You have successfully cleaned the complete fuel system, crankcase and intake system! Regular maintenance will provide optimum power and performance, and save expensive repair costs.



# FULL THROTTLE FUEL SYSTEM CLEANER

Concentrated formula contains no alcohols or other harmful solvents, eliminating concerns about technicians' health and sensitive automotive components.

# **Description**

A premium, high tech formula designed to clean the complete fuel system from the gas tank to the exhaust. This highly concentrated formula dissolves gum, varnish and carbon deposits while safely removing water and contaminants through the combustion process. Cleans fuel injectors to restore and maintain spray patterns, cleans intake valves and combustion chambers. The "no alcohol" formula lubricates while conditioning to reduce future deposits from adhering to surfaces. Reduces pinging and harmful emissions.

# **Applications**

All fuel injected and carburetor engines, both gasoline and diesel. This product is excellent for all marine applications, including 2-cycle engines.

One 11 oz/325 ml bottle treats up to 45 gallons of fuel. Apply full contents.



Components	Benefits
	Cleans gums and varnishes from the fuel system and harmful deposits from the upper cylinder area. Thoroughly cleans injectors or carburetor and intake components.
	Removes harmful moisture and protects against rust and corrosion. Solubilizes water into fuel by creating a hydrogen bond between water molecules and fuel molecules, improving combustion by squelching hot spots in the combustion chamber, thus converting water from a potential fuel system "problem" into a "combustion improver."
	Slows the fuel burn for more effective cleaning while providing more power, improved fuel economy and less emissions. Boosts octane and works as a catalyst to enhance the completeness of the fuel burn to reduce pinging.
·	Lubricates the fuel pump, injectors, valves, upper cylinder area and top rings to extend engine life and provide protection during the cleaning process. Conditions to reduce future deposits. Especially useful with unleaded fuel.

**Package Part Number** 

11 ounce / 325 ml bottles, 24 per case

FTPF 20

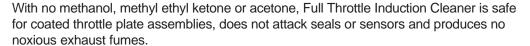
# FULL THROTTLE INDUCTION CLEANER

 2-stage cleaning with harmful solvents, eliminating concerns about technicians' health and sensitive automotive components.

### **Description**

Full Throttle Induction Cleaner removes deposits and helps the engine breathe freely again, restoring performance and fuel economy while reducing emissions. Premium oil-based components provide safe, 2-stage cleaning:

- 1. Light volatiles quickly remove gums and varnish from the intake manifold and runners, valves and combustion chambers.
- 2. Thermally stable components remain to soften and safely remove hard carbon deposits, while also lubricating the system. This thermal stability reaches into the combustion chamber and the exhaust system, removing combustion chamber deposits for improved performance, cleaning the oxygen sensor for enhanced sensor response and the catalytic converter for reduced emissions. Lubricates while cleaning.





## **Applications**

Piston type engines, except diesel engines. (Do not apply to rotary engines.)

Designed for Full Throttle delivery device application by trained technicians following simple Full Throttle Application Sheet instructions. Unlike machine and aerosol based cleaning systems, Full Throttle Induction Cleaner requires no expensive equipment or multiple adaptors, and requires no connection to the fuel rail.

# Components ...... Benefits

Lightweight Volatiles	Dissolves intake manifold and runner deposits, removes carbon deposits from valves and combustion chambers. Cleans spark plugs, oxygen sensor and catalytic converter.
Surfactants	Promotes more thorough cleaning, inhibits rust and corrosion. Reduces interfacial tension between deposits and engine surfaces.
Aliphatic Hydrocarbons	Softens hard deposits to aid removal, restoring proper air flow through the intake system. Lubricates while cleaning, reducing further deposit formation.
Elastomers	Aids maintenance of elasticity in seals and o-rings, reducing likelihood of dry, cracked and swollen seals and o-rings and related fuel system component failure.

### Package Part Number

12 ounce (354ml) bottles

FTPI 30, sold as part of Kits; FTPK 10, FTPK 10T & FTPK B2

# FULL THROTTLE ENGINE TREATMENT

### With PTFE, the ultimate protection

### **Description**

A superior formula designed to protect engine friction surfaces by providing a bonded PTFE treatment, like "wet ice on wet ice," as a substitute wear surface that prolongs engine life while improving performance.

## **Applications**

All engines—including gasoline, diesel, propane and alternative fuels. Excellent for turbo and supercharged engines.

For automobiles and light trucks, replace one quart of motor oil with one quart of Engine Treatment at oil change.

PTFE treatment is a friction surface metal treatment, not an oil treatment. Therefore, in larger engines with reserve oil capacity (marine, heavy equipment and trucks, large stationary engines, etc.), add 1 quart for each 3 liters of combustion cylinder displacement.



### **Application Interval**

Apply every 15,000 miles / 24,000 km or every year, whichever comes first.

### **Features & Benefits**

Feature	Benefit
Specialized PTFE	High-molecular weight PTFE provides the ultimate in long-term protection, "like wet ice on wet ice."
Chemically inert	. PTFE is chemically inert (does not react with other chemicals), and has proven safe in applications including medical and hospital.
Metal preparation	. Special metal preparation formula prepares friction surfaces for treatment.
Suspending agents	. Provides PTFE readily available for maximum treatment.
Bonding agents	. Especially formulated to "treat," or fuse PTFE onto all metal-to-metal lubricated surface high points.
Micro-thin	. Sub-micron treatment will not reduce tolerances.
Permanently fused	. PTFE treatment remains on friction surfaces, does not drain with oil at engine shut-down.
Wear reduction	. Reduces wear by 30 to 90% as shown by oil analysis reports, and friction-related heat, increasing engine life.
Performance	. Improves performance by reducing friction.
Compatible	. Designed for use with all motor oils, including synthetics and synthetic blends.
Safe	. Laboratory engine test (Sequence IIIE) proven safe and effective. <b>Does</b> not contain chlorine or other potentially harmful components.

# FULL THROTTLE OIL SYSTEM CLEANER

### — The professional's choice for the complete oil change

# **Description**

A concentrated petroleum-based detergent formula designed to quickly remove oil system deposits, gums and varnish. Improves oil circulation, helps extend engine life by reducing wear. Helps free stuck piston rings to improve compression, reduce blowby and excess oil consumption. Helps free sticky lifters and restore o-rings and seals. Friction modifiers and extreme pressure agents lubricate and protect while cleaning.

Promotes a more complete drain of used oil.

# **Applications**

Can be used in any crankcase application, both gas and diesel engines.

### Features & Benefits

Feature	. Benefit
Concentrated Oil Based Detergents	Detergent action scours away carbon deposits, gum, and varnish. Helps free sticky lifters and maintains good flow of lubricant through engine. Frees piston ring land deposits, reducing compression loss, blow-by and excess oil consumption.
Extreme Pressure Agents	. Improves lubrication of critical areas and protects against loss of lubrication during cleaning.
Suspending Agents	. Helps emulsify dirt and contaminants for safe removal from crankcase.
Gasket and Seal Rejuvenators	. Maintains elasticity of o-rings and seals.
No kerosene or harsh solvents	. Kerosene and other harsh solvents found in many engine flushes can reduce lubrication and damage seals and gaskets.

### **Package**

### **Part Number**

11 ounce / 354 ml bottles, 24 per case

FTPO 40

# FULL THROTTLE INTERNAL ENGINE CLEAN

### ---- New Improved Formula ----

Vehicle manufacturers are specifying lower viscosity engine oils such as 0W-20, 5W-20, to name a
few, along with 5W-30 and 10W-30. To meet all of these viscosities, QMI changed its formula. This
new formula provides superior, safe cleaning while meeting O.E. specifications for multiple oil
viscosities.

Safe oil-based crankcase cleaning with no harsh solvents or kerosene, the professional's choice for a complete oil change.

### **Description**

A concentrated lubricating oil-based detergent formula designed to quickly remove oil system deposits, gums and varnish, restoring smooth, quiet engine operation.

Improves oil circulation, helps extend engine life by reducing wear.

Helps free sticky lifters and restore o-rings and seals. Friction modifiers and extreme pressure agents lubricate and protect while cleaning.

Promotes a more complete drain of used oil.

# **Applications**

Any crankcase application, both gasoline and diesel engines.

### **Features & Benefits**

Feature	Benefit
Lubricating Oil	While most engine flushes contain inexpensive solvents that reduce viscosity and lubrication, Internal Engine Clean is premium lubricating oil-based to maintain viscosity and lubrication for safe, thorough cleaning and conditioning.
Oil Based Detergents	Detergent action scours away carbon deposits, gums and varnish. Helps free sticky lifters and maintains good flow of lubricant through engine. Frees piston ring land deposits, reducing compression loss, blow-by and excess oil consumption.
Extreme Pressure Agents	Improves lubrication of critical areas and protects against loss of lubrication during cleaning.
Suspending Agents	Helps emulsify dirt and contaminants for safe removal from crankcase.
Gasket and Seal Rejuvenators	Maintains elasticity of o-rings and seals.
No kerosene or harsh solvents	Kerosene and other harsh solvents found in many engine flushes can reduce lubrication and damage seals and gaskets.

Package: 1 gallon bottles, 4 per case Part Number: FT EC

# FULL THROTTLE OIL SYSTEM BOOSTER

 Lubricating oil-based crankcase conditioning and cleaning, safe and effective with no harsh solvents or kerosene

### **Description**

A concentrated lubricating oil-based detergent formula with premium conditioning components designed to safely and gently protect and restore smooth, quiet engine operation while removing oil system deposits, gums and varnish.

Improves oil circulation, helps extend engine life by reducing wear. Helps free stuck piston rings to improve compression, reduce blow-by and excess oil consumption. Helps free sticky valves and lifters and restore o-rings, seals and gaskets. Friction modifiers and extreme pressure agents lubricate and protect while cleaning.

This oil-based product is designed to remain in the crankcase for a full oil change interval, promoting a more complete drain of used oil.



### **Applications**

Can be used in any crankcase application, both gas and diesel engines.

Components	Benefits
Lubricating Oil	While most engine flushes contain inexpensive solvents that reduce viscosity and lubrication, FULL THROTTLE Oil System Booster is premium lubricating oil-based to maintain viscosity and lubrication for safe, thorough, long term conditioning.
Concentrated Oil-Based Detergents	Detergent action scours away gum, varnish and carbon deposits. Helps free sticky valves and lifters, and maintains good flow of lubricant through the engine. Frees piston ring deposits, reducing compression loss, blow-by and excess oil consumption.
Extreme Pressure Agents	Improves lubrication of critical areas and protects against loss of lubrication during cleaning.
Suspending Agents	Helps emulsify dirt and contaminants for safe removal from the crankcase.
Gasket and Seal Rejuvenators	Maintains elasticity of o-rings, seals and gaskets.
No Kerosene or Harsh Solvents	Kerosene and other harsh solvents found in many engine flushes can reduce lubrication and damage o-rings, seals and gaskets.

### **Package**

Sold as part of FTPK 10 Kit

# **Full Throttle High Mileage Supplement**

### - Extend your engine's life

### **Description**

A concentrated formula with premium lubricating and conditioning components designed to extend the life of engines over 5 years or 50,000 miles. Friction modifiers and extreme pressure agents lubricate and protect friction surfaces to extend engine life.

Safely and gently protects and restores smooth, quiet engine operation while removing oil system deposits, gums and varnish. Helps free stuck piston rings to improve compression, reduce blow-by and excess oil consumption. Helps free sticky valves and lifters and restore o-rings, seals and gaskets. Improves oil circulation.

Stops oil leaks by restoring seal elasticity and gently increasing seal size to fill the leak causing gaps. Contains no harmful aromatic solvents, which cause uncontrolled seal swelling and loss of elasticity. Revitalizing components go further to condition and restore deteriorated seals, while the "no aromatic solvents, no chlorine" formula protects against drying, shrinking, hardening, embrittlement and cracking.



### **Features**

- · Enhance oil's lubricating properties, prolongs engine life
- · Reduce viscosity breakdown
- · Conditions and restores seals and o-rings
- Protect for manufacturer's extended oil change intervals
- · Stops leaks

# **Applications**

Designed for older engines, can be used in any crankcase application, both gas and diesel engines.

Components	Benefits
Extreme Pressure Agents	Improve lubrication of critical areas and extend engine life.
Gasket and Seal Rejuvenators	Restores elasticity of o-rings, seals and gaskets, stops leaks.
Viscosity stabilizers	Maintain viscosity and lubrication for safe, thorough, long-term protection and conditioning.
Oil-Based Detergents	Detergent action scours away gum, varnish and carbon deposits. Helps free sticky valves and lifters, and maintains good flow of lubricant throughout the engine. Frees piston ring deposits, reducing compression loss, blow-by and excess oil consumption.
Suspending Agents	Helps emulsify dirt and contaminates for safe removal from the crankcase during oil drain.

# FULL THROTTLE AUTOMATIC TRANSMISSION FLUSH

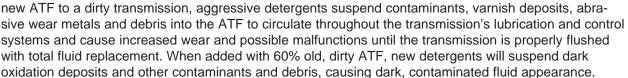
### Flush those high repair costs before they occur

### The problems

Most transmission failures occur because the transmission fluid is not changed.

Automatic transmissions subject ATF to high temperatures and pressures, causing oxidation, fluid deterioration and eventually breakdown; reducing lubricity while accumulating contaminants, varnish deposits, friction material debris and abrasive wear metals that grind seals, valves and friction surfaces. Lack of maintenance can inhibit shifting, cause leaks and premature transmission failure.

Unlike engine oil, the traditional method of changing ATF - removing the pan, changing the screen and gasket and then adding ATF – typically replaces less than 40% of the fluid. So 60% of the "problem" fluid stays in the torque converter, valves and cooler lines. New ATF contains more detergents than any other vehicle fluid. When adding





Automatic transmission flushing and fluid replacement before damage occurs will save customers major repair work and transmission replacement. Regular maintenance service provides the best "insurance" against high repair costs.

Full Throttle Automatic Transmission Flush changes all of the ATF, safely removing deposits and cleaning transmission components, including the torque converter and cooler. Safe, powerful cleaner dissolves and suspends deposits, flushing the entire system of oxidized AFT, varnish deposits, debris and other contaminants. Abrasive wear metals that grind away seals, valves and friction surfaces are removed. All internal components are cleaned and lubricated with fresh ATF. Flushing before adding ATF allows the new ATF to lubricate and control properly without problems caused by detergents suspending previous deposits and other contaminants (see The problems).

### **Benefits**

Full Throttle Automatic Transmission Flush application flushes the transmission and replaces ATF:

- Removes contaminants and deposits from all transmission components, before adding new ATF
- Removes abrasive wear metals and debris
- Reduces wear and premature component failure
- Reduces costly repairs due to transmission failure Prepares transmission for new fluid
- · Compatible with all ATF type fluids
- · Helps extend o-ring and seal life

### **Directions**

- 1. Before beginning service, add Automatic Transmission Flush directly to transmission through fill tube.
- 2. With vehicle in park and the parking brake on, run vehicle for 8 to 10 minutes.
- 3. Execute transmission flush and fluid replacement, following procedures included with Full Throttle Automatic Transmission Flush Equipment.

Note: Do not apply to CVTs (Constantly Variable Transmissions).



# FULL THROTTLE AUTOMATIC TRANSMISSION FLUSH KIT

### — With PTFE, the ultimate protection

### **Description**

Complex automatic transmissions operate under high temperature and stress. Malfunctions bring power loss and poor fuel economy, and repairs are costly.

Protect automatic transmissions with Full Throttle's bonded PTFE treatment, listed in Guiness as like "wet ice on wet ice", as a substitute wear surface that reduces heat while prolonging life and trouble-free operation. After application, polarized PTFE is drawn into friction surface pores. Then metal-to-metal mechanical action combines with Full Throttle's bonding agents to fuse micro-thin PTFE treatment onto metal surface high points. Now friction surfaces glide by each other on super-slippery PTFE. Full Throttle's PTFE treatment is permanently fused and chemically inert, assuring long lasting protection against wear and corrosive attack. (Since only metal-to-metal surfaces receive treatment, no slippage occurs on metal-to-fiber clutch disks and bands.)



### **Applications**

All automatic transmissions in automobiles, light trucks and similar vehicles. Compatible with all ATF fluids.

#### **Directions**

Shake and add 8 ounces to ATF in automatic transmission. Idle immediately for 5 minutes. Retreat every 25,000 miles or when changing ATF.

### Features & Benefits

Features	Benefits
Wear reduction	Increased transmission life.
Improved performance	Less friction related power loss.
Reduced heat	Diminishes ATF's greatest enemy.
Easier shifting	Helps control mechanisms operate freely.
Seal & o-ring rejuvenators	Restores elasticity to prevent/reduce leakage.
Specialized PTFE	FULL THROTTLE's high-molecular weight PTFE provides the ultimate in long-term protection, "like wet ice on wet ice," especially formulated to "treat," or fuse PTFE into all metal-to-metal lubricated surfaces.
Metal preparation formula	Special metal preparation formula prepares friction surfaces for treatment.
Suspending agents	Provides PTFE readily available for maximum treatment.
Bonding agents	Especially formulated for fusion into all metal-to-metal friction surfaces while preventing over-treatment and loss of critical tolerances.
Safe	Does not treat clutch disks and bands, so no slippage occurs.s

Note: Do not apply to CVTs (Constantly Variable Transmissions).

# FULL THROTTLE AUTOMATIC TRANSMISSION TREATMENT

- With PTFE, the ultimate protection
- Longer life and more power from you transmission

### **Description**

Complex automatic transmissions operate under high temperature and stress. Malfunctions bring power loss and poor fuel economy, and repairs are costly.

Protect automatic transmissions with Full Throttle's bonded PTFE treatment, listed in *Guiness* as like "wet ice on wet ice", as a substitute wear surface that reduces heat while prolonging life and trouble-free operation. After application, polarized PTFE is drawn into friction surface pores. Then metal-to-metal mechanical action combines with Full Throttle's bonding agents to fuse micro-thin PTFE treatment onto metal surface high points. Now friction surfaces glide by each other on super-slippery PTFE. Full Throttle's PTFE treatment is permanently fused and chemically inert, assuring long lasting protection against wear and corrosive attack. (Since only metal-to-metal surfaces receive treatment, no slippage occurs on metal-to-fiber clutch disks and bands.)



# **Applications**

All automatic transmissions in automobiles, light trucks and similar vehicles. Compatible with all ATF fluids.

### **Directions**

Shake and add 8 ounces to ATF in automatic transmission. Idle immediately for 5 minutes. Retreat every 25,000 miles or when changing ATF.

### **Features & Benefits**

F--1----

Features	. Benefits
Wear reduction	. Increased transmission life.
Improved performance	. Less friction related power loss.
Reduced heat	. Diminishes ATF's greatest enemy.
Easier shifting	. Helps control mechanisms operate freely.
Seal & o-ring rejuvenators	. Restores elasticity to prevent/reduce leakage.
Specialized PTFE	. Full Throttle's high-molecular weight PTFE provides the ultimate in long- term protection, "like wet ice on wet ice," especially formulated to "treat," or fuse PTFE onto all metal-to-metal lubricated surface high points.
Metal preparation formula	. Special metal preparation formula prepares friction surfaces for treatment.
Suspending agents	. Provides PTFE readily available for maximum treatment.
Bonding agents	. Especially formulated for fusion into all metal-to-metal friction surfaces while preventing over-treatment and loss of critical tolerances.
Safe	. Does not treat clutch disks and bands, so no slippage occurs.

Note: Do not apply to CVTs (Constantly Variable Transmissions).

# FULL THROTTLE HIGHLY FRICTION MODIFIED ATF SUPPLEMENT - FULLY SYNTHETIC

## — Enhances Dexron® III / Mercon® fluid to perform as a Highly Friction Modified fluid

### **Description**

Fully synthetic, especially designed to enhance Dexron® III / Mercon® ATF fluids to perform as a Highly Friction Modified fluid.

For applications, see current Automatic Transmission Fluid Conversion Chart.

### • Do not apply to CVTs

Automatic transmissions are complex units; automatic transmission fluid, or ATF, transmits engine power to the transmission through an automatic clutch unit, controls the transmission's internal hydraulic system and lubricates the bearings, bushings and gears while controlling the friction qualities of the clutches and bands. ATF must also transfer fluid friction heat from the torque converter, and heat from a wide variety of friction surfaces—including clutch plates that can instantaneously reach temperatures of 1,100°F (600°C). While optimum transmission operating temperature is 150 to 190°F (65 to 87°C), front-wheel drive transmissions may operate at temperatures as high as 225 to 250°F (107 to 121°C).



# Features & Benefits

Features	Benefits
Insures proper shifting	Provides for smoother shifting and reduces drive train power losses, helps modify harsh shifts and make them smoother.
Anti-shudder in converter clutches Anti-chatter in clutch packs	
Keeps components free	Helps keep your transmission components functioning freely—the torque convertor, planetary gears, bands and clutches, shift valves, servos and accumulators, governor and modulator.
Inhibits overheating, oxidation, extends ATF life, reduces wear	Improves thermal oxidative stability, removing heat by increasing fluidity, reducing operating temperatures. Increased fluidity with reduced friction reduces operating temperatures, increases fluid life and transmission life. Improved shear stability and reduced metal-to-metal wear increases fluid and transmission life.
Meets or exceeds OEM specs	Applied at proper ratios, meets or exceeds OEM specifications for

### **Directions**

Exchange or replace all vehicle ATF with Dexron® III / Mercon® ATF. For automotive and light truck applications, add one 10 ounce container of HFM ATF Supplement to the vehicle. For vehicle capacity greater than 11 quarts, add an additional ounce of HFM ATF Supplement for each quart of ATF greater than 11 quarts. Add with motor idling in park.

Check dipstick or owner's manual for proper fluid type, do not use with Mercon® V. Do not overfill. Do not apply to CVTs (Constantly Variable Transmissions).

Package 10 ounce bottles, 12 per case

Part Number FTA 61

Specialty Lubricant Fluid and Highly Friction Modified applications.

# FULL THROTTLE M-V ATF SUPPLEMENT - FULLY SYNTHETIC

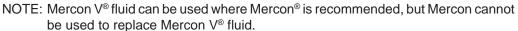
— Enhances Dexron® III / Mercon® fluid to perform as a Mercon V® type fluid

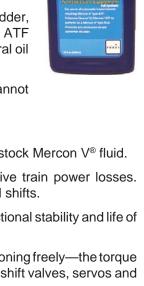
## **Description**

Full Throttle M-V ATF Supplement is a uniquely blended fully synthetic product specifically designed to convert and enhance Dexron® III/ Mercon® fluid to perform as a Mercon V<sup>®</sup> type fluid and extend the frictional stability of the fluid, preventing converter lockups shudder. Full Throttle M-V ATF Supplement extends fluid life, saving time and money.

 Mercon V<sup>®</sup> was introduced by the Ford Motor Company in 1997 for use in 1997 and later A4LD-E (4R44E) and 5R55E transmissions. Mercon V<sup>®</sup> is also required for 1998 vehicles with AX4N and AX4S transaxles, plus the AODE-W (4R70W) transmission.

Full Throttle M-V ATF Supplement works instantly to eliminate torque converter shudder, enabling you to service your customer's vehicle immediately. Full Throttle M-V ATF Supplement is made from synthetic base stocks and additives, out performing mineral oil based products especially in extreme heat and cold conditions.





Features	Benefits
Economy	Saves time and money, eliminates the need to stock Mercon V® fluid.
Lubrication enhancers	Provides for smoother shifting and reduces drive train power losses. Improves low temperature shifting, softens hard shifts.
Thermal stability	Prevents overheating and oxidation, extends frictional stability and life of the fluid. $ \\$
Keeps components free	Helps keep your transmission components functioning freely—the torque convertor, planetary gears, bands and clutches, shift valves, servos and accumulators, governor and modulator.
Converter clutch anti-shudder	Prevents torque converter lockups shudder because of the transmissions' unique frictional requirements.
Meets or exceeds requirements	Dexron III®/Mercon® ATF treated with M-V ATF Supplement meets performance requirements for vehicles requiring Mercon V® type ATF.

### **Directions**

Exchange or replace all vehicle ATF with Dexron® III/ Mercon® ATF. For automotive and light truck applications, add one 10 ounce container of M-V ATF Supplement to the vehicle. For vehicle capacity greater than 11 quarts, add an additional ounce of M-V ATF Supplement for each quart of ATF greater than 11 quarts. Add with motor idling in park.

Always check dipstick or owners manual for proper fluid type. Do not overfill.

Note: Do not apply to CVTs (Constantly Variable Transmissions).s

Package: 10 ounce bottles, 12 per case Part Number: FTA 62

# FULL THROTTLE D-VI ATF SUPPLEMENT

# — Fully Synthetic Formula

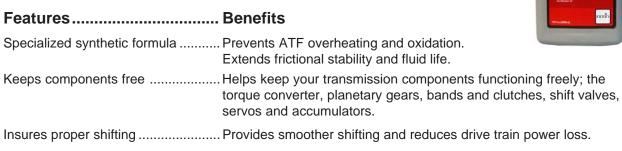
### **Description**

A superior formula designed to enhance ATF that meets or exceeds Dexron® III / Mercon® ATF specifications to perform as a highly stable fluid such as Dexron® VI.

### **Applications**

All General Motors vehicles specifying Dexron® VI as the preferred ATF fill.

### **Features & Benefits**



### **Directions**

Note: Check dipstick or owner's manual for proper fluid type. Do not overfill.

Exchange or replace all vehicles ATF with Dexron® III / Mercon® or equivalent.

For automotive and light truck applications, add one 10 ounce bottle of ATF D-VI Supplement to the vehicle.

For vehicle capacity greater than 11 quarts, add an additional one ounce of D-VI Supplement for each quart of ATF greater than 11 quarts.

Add with motor idling in park.

Note: Do not apply to CVTs (Constantly Variable Transmissions).

Package: 10 ounce bottles, 12 per case Part Number: FTA 65

# FULL THROTTLE CVT PLUS AUTOMATIC TRANSMISSION FLUID — Fully Synthetic

### Benefits Packaging

•	Exceptional anti-wear performance	Code	<b>Container Size</b>	Package
•	Improved anti-shudder	58032	1 quart / 946 ml	12 per case
•	Improved oxidation performance	58128	1 gallon / 3.8 L	4 per case

- Year-round protection
- · High and low temperature performance
- Enhanced CVT and slip-lock performance
- · Extended equipment life
- · Compatibility with factory fill automatic transmission fluids

### **Description**

A premium automatic transmission fluid offering outstanding performance benefits for virtually every automatic transmission on the road. This well-engineered product is a unique blend of synthetic base oils coupled with a multifunctional additive system for unsurpassed protection and performance.

### **Inventory Optimizer**

Full Throttle CVT Plus ATF is compatible with today's high-performance transmissions including continuously variable transmissions (CVT), transmissions that require slip-lock fluid technology, as well as older vehicles. This unmatched compatibility allows for inventory simplification and reduces the risk of misapplication.

This premium fluid was engineered to exceed stringent performance requirements of transmission manufacturers worldwide. It provides exceptional performance in automatic transmissions manufactured by General Motors, Ford, Chrysler, BMW, Honda, Mercedes Benz, VW, Hyundai, KIA, Honda, Nissan, Mitsubishi, Toyota and others.

— See Performance Applications

## **Performance Testing**

Extensive testing demonstrates Full Throttle CVT Plus ATF's exceptional performance in the laboratory and on the road. This product endures the industry's most severe wear tests to ensure its chemistry and engineering will continue to meet or exceed stringent performance requirements set by manufacturers worldwide.

# **Performance Applications**

Aisin Warner AW-1	DEXRON <sup>®</sup> VI	MAN 339F	Nissan Matlc-J	Voith 55.6336.XX
Allison C-4	Esso LT 71141	MAN 339 V1	Nissan Matic-K	(G1363)
Allison TES-295	Ford Type F	MAN 339 V2	Saab 93 165 147	Volvo 97340
Allison TES-389	Ford MERCON®	MAN 339 Z1	Shell 3403	VW G 052 025-A2
Audl G 052 025-A2	Ford MERCON® V	MAN 339 Z2	Shell LA2634	VW G-052-162-AI
Audi G-052-162-A1	Ford MERCON® SP	MAN 339 Z3	Shell M-1375.4	ZF TE-ML 03D
BMW 7045E	Ford MERCON® LV	Mazda ATF-M III	Subaru ATF	ZF TE-ML 04D
BMW LA2634	Honda ATF-Z1	Mazda ATF-MV	Texaco ETL-7045	ZF TE-ML 09
BMW LT 71141	Hyundai SP-II	Mercedes Benz 236.1,	Texaco ETL-8072B	ZF TE-ML 14A
Chrysler ATFs	Hyundai SP-III	236.2, 236.5, 236.6,	Texaco N402	ZF TE-ML 14B
DEXRON <sup>®</sup>	Idemitsu K17	236.7, 236.9, 236.10	Toyota T-III	ZF TE-ML 14C
DEXRON®-II	JASO 1-A	and 236.12	Toyota T-IV	ZF TE-ML 16L
DEXRON®-II D	JWS 3309	Mitsubishi Diamond SP-II	Toyota WS	ZF TE-ML 17C
DEXRON®-III G	Kia SP-11	Mitsubishi Diamond SP-III	Voith 55.6335.XX	CVT
DEXRON®-III H	Kia SP-III	Nissan Matic-D	(G607)	

# FULL THROTTLE POWER STEERING FLUSH KIT

### Flush high repair costs before they occur

### The problem

Power steering systems subject power steering fluids to high temperatures and pressures, causing oxidation, fluid deterioration and eventually breakdown, reducing lubricity while accumulating varnish deposits, abrasive wear metals and debris that grind seals, valves and friction surfaces. Lack of maintenance can inhibit steering, and cause leaks and premature power steering unit failure.

Symptoms that the power steering system has gone too long without maintenance include:

- Dark fluid color
- · Rough, jerky or hard turns
- Power steering unit squeal
- Stiff steering on "cold starts"
- Fluid leaks



### The solution

Power steering system flushing and fluid replacement before damage occurs will save customers major repair work and expensive power steering component replacement. Regular maintenance service provides the best "insurance" against high repair costs. The Full Throttle Power Steering Flush Kit includes:

### 1. Full Throttle Power Steering Flush

Safe, powerful cleaner dissolves and suspends deposits. Flushes the entire system of oxidized power steering fluid, varnish deposits, wear metals, debris and other contaminants.

### 2. Full Throttle Power Steering Fluid and Conditioner

Replaces old fluid with highly refined base oils, friction modifiers and select additives designed to lubricate and protect all moving parts against squeal, chatter and wear, providing continuous hydraulic actuation under the severest of temperatures and conditions. Protects against oxidation and corrosion, foaming and clogging, conditions and revitalizes seals and o-rings.

**Compatibility:** Power Steering Fluid and Conditioner is formulated from a select blend of highly refined 100% virgin base oils, formulated to operate effectively in almost all power steering units and blended for compatibility with original equipment fluids. Exceptions include:

- · Silicone based fluids
- Full synthetic fluids

Check the vehicle specifications before applying.

### **Benefits**

Full Throttle Power Steering Flush Kit application flushes the power steering system completely, and replaces power steering fluid. Benefits include:

- Removes contaminants and deposits
- Removes abrasive wear metals and debris
- Reduces wear and premature component failure
- Restores quiet, smooth, uniform steering control
- Reduces costly repairs due to system failure
- Restores lubricity
- Restores ease of steering
- Reduces valve sticking and squeal
- Rejuvenates seals to help prevent fluid leaks
- · Provides safe, secure steering

Part Number FTP 81

**Package** 3 sets of 2 - 64 ounce / 2 qt. bottles per case